

WHAT IS CLAIMED IS:

1. A method for transmitting data between a mobile radio transmitter and a radio receiver of a machine or plant, comprising:

 providing a first radio link between the radio transmitter and the radio receiver for transmitting safety related information; and

 providing a second radio link between the radio transmitter and the radio receiver for transmitting non-safety related information.
2. The method as claimed in Claim 1, wherein the first and the second radio link are set up and operated concurrently.
3. The method as claimed in Claim 1, wherein the first radio link is operated with a maximum packet life.
4. The method as claimed in Claim 3, wherein the first radio link is operated synchronously with a maximum packet life.
5. The method as claimed in Claim 1, further comprising using the first radio link to transmit duplicates of the safety related information.
6. The method as claimed in Claim 5, wherein a predefined number of the duplicates is transmitted.
7. The method as claimed in Claim 5, wherein the duplicates of the safety related information are transmitted until new safety related information is available.
8. The method as claimed in Claim 5, wherein the duplicates of the safety related information are transmitted until the transmitted information has been correctly received.

9. The method as claimed in Claim 1, wherein the first and the second radio links are set up via a single radio system.
10. The method as claimed in Claim 1, wherein safety related information is transmitted via the SCO link of a radio system using the Bluetooth standard.
11. The method as claimed in Claim 1, wherein non-safety related information is transmitted via the ACL link of a radio system using the Bluetooth standard.
12. The method as claimed in Claim 11, wherein non-safety related information is transmitted via the ACL link of a radio system using the Bluetooth standard.
13. The method as claimed in Claim 12, wherein information is transmitted via a single radio system using the Bluetooth standard.
14. A radio transmitter configured to transmit data to a radio receiver of a machine or plant, comprising:
a first radio link for transmitting safety related information; and
a second radio link for transmitting non-safety related information.
15. A radio receiver of a machine or plant, configured to receive data from a radio transmitter, comprising:
a first radio link for receiving safety related information; and
a second radio link for receiving non-safety related information.